WEARABLE DEVICE FOR CARRYING AN ELONGATED STRUCTURE IN A GENERALLY VERTICAL ORIENTATION

Field of the Invention

[0001] The present invention relates to a wearable device for carrying an elongated structure in a generally vertical orientation. The device may be configured for various uses, such as for carrying skis and related equipment, a snowboard and related equipment, a collapsible kayak and related equipment, or any other elongated structure.

Background of the Invention

[0002] U.S. Patent No. 4,518,107 discloses a device constructed to enable a wearer to carry a pair of skis on his/her back. The device disclosed in the '107 patent, while capable of carrying a pair of skis, is not particularly well-designed from an ergonomic standpoint. The present invention endeavors to provide an improved construction for carrying elongated structures, such as a pair of skis.

Summary of the Invention

[0003] One aspect of the present invention provides a wearable device for carrying an elongated structure with opposing ends in a generally vertical orientation. In the context of the invention, the term "generally vertical orientation" encompasses any orientation that has a substantial vertical component to it. Thus, an elongated structure oriented diagonally would be considered at a generally vertically orientation, but an elongated structure oriented horizontally would not be considered to be at a generally vertical orientation when the wearable device is worn. The device comprises a harness constructed to attach to a user's torso in an operative position. In the context of the invention, the term "harness" means any structure designed for attaching the device to a user's torso in a manner that enables the user's hands to be free. For example, the term harness could encompass a pair of shoulder straps that attach the device over a user's shoulders, a bandolier-type attachment over one shoulder, or an article of clothing that is worn on the user's torso (e.g., a jacket or vest). Also, the term "operative position" is intended to mean the position in which the device would normally be worn by the user. One or more retainers are attached to the harness and positioned with respect to the harness so as to be located adjacent the user's back when the

wearable device is worn in the operative position. The one or more retainers are constructed to retain a portion of the elongated structure between the opposing ends thereof.

[0004] The device further comprises a receptacle constructed to receive one of the opposing ends of the elongated structure. One or more support members attach the receptacle to the harness so as to suspend the receptacle below the one or more retainers and the harness when the wearable device is worn in the operative position. The one or more retainers and the receptacle are arranged with respect to one another such that, when the wearable device is worn in the operative position, the one or more retainers and the receptacle cooperate to support the elongated structure in the generally vertical orientation with (a) a lower one of the opposing ends of the elongated structure being received in the receptacle so as to be supported by the receptacle, and (b) the one or more retainers engaging a portion of the elongated structure between the opposing ends thereof to retain the elongated structure in the generally vertical orientation.

[0005] As an advantageous, but optional, feature, the receptacle may be vertically adjustable to enable adjustment of a distance at which the receptacle is suspended below the harness when the wearable device is worn in the operative position. This is particularly advantageous when the device is designed for carrying certain elongated structures that come in varying lengths. For example, typical alpine skis range in length from 140cm to 210cm (less commonly, shorter or longer skis may be encountered, such as shorter skis for children, or longer skis for racing). With the ability to adjust the receptacle's vertical position, the wearer can ensure that the skis are positioned properly on his/her back. For example, if the wearer is carrying a very long pair of skis, and the receptacle is positioned to high, the center of gravity of the skis will be high, possibly making it uncomfortable for the user. Also, the upper ends of the skis may be so high that they may make it difficult to walk through doorways in a ski lodge without crouching. Likewise, if the wearer is carrying a very short pair of skis, and the receptacle is positioned too low, the lower end of the skis and the receptacle may swing back and forth and strike the wearer's legs during walking (although the receptacle should be relatively lower for long skis and some swinging of the receptacle and the lower ends of the skis may occur, it is not as significant of an issue as it would be when supporting shorter skis in the receptacle at the same lowered height because the greater weight of longer skis reduces such swinging, and also the counterbalancing effect provided by the longer upper end offsets such swinging).

[0006] Another aspect of the invention provides a wearable device for carrying an elongated structure with opposing ends in a generally vertical orientation, the device

comprising an outer garment shell. The outer garment shell is configured to cover a user's torso (either wholly or partially) when the wearable device is worn in the operative position. The term "outer garment shell" is intended to encompass any type of garment wearable by the user over his/her torso, wherein the garment constitutes the outer shell of the device. The garment may be a jacket or vest, and may be insulated or not. An internal harness is mounted interiorly of the outer garment shell and is constructed to attach to the user's torso when the wearable device is worn in the operative position.

[0007] One or more supports are attached to the internal harness so as to be located adjacent the user's back when the wearable device is worn in the operative position. The one or more supports are located in one or more spaces defined between the internal harness and the outer garment shell. The outer garment shell has one or more access openings for accessing the one or more spaces to permit the one or more supports to be positioned exteriorly of the outer garment shell for use. The one or more supports are constructed to support the elongated structure on the internal harness in the generally vertical orientation thereof when positioned exteriorly of the outer garment shell for use, thus allowing weight of the elongated structure to the transferred to the user's torso via the internal harness. It should be understood that the one or more supports may be any support structure suitable for supporting the elongated structure in its generally vertical orientation. The one or more supports may be constituted by the retainers and receptacle discussed above, or may have any other construction or configuration.

[0008] Other objects, aspects, and features of the present invention will become apparent from the following detailed description, the accompanying drawings, and the appended claims.

Brief Description of the Drawings

- [0009] Fig. 1 illustrates a device constructed in accordance with the present invention while being worn by a user;
 - [0010] Fig. 2 illustrates the device of Fig. 1, but not worn by the user;
- [0011] Fig. 3 illustrates the device of Fig. 1, being worn by the user with a pair of skis being carried;
- [0012] Fig. 4 illustrates an alternative device constructed in accordance with the present invention, while being worn by a user;
 - [0013] Fig. 5 illustrates the device of Fig. 4 on the user, from another angle;
 - [0014] Fig. 6 illustrates the device of Fig. 4 on the user, from another angle;

- [0015] Fig. 7 illustrates another alternative device constructed in accordance with the present invention, while being worn by a user;
- [0016] Fig. 8 illustrates the device of Fig. 7 taken off the user and opened for mounting the elongated structure;
- [0017] Fig. 9 is a front view yet another alternative device constructed in accordance with the present invention, the outer part of the device being shown in dashed lines for enabling the underlying harness to be seen;
- [0018] Figure 10 is a front view of the device of Fig. 9, but with the outer part of the device being shown in solid lines;
- [0019] Figure 11 is a rear view of the device of Fig. 9, with the retainers and receptacle stored within the device; and
- [0020] Figure 12 is a rear view of the device of Fig. 9, but with the retainers and receptacle removed from their stored position so as to be ready for receipt of an elongated structure.

Detailed Description of the Illustrated Embodiment(s)

- [0021] Figures 1-2 illustrate a wearable device 10 for carrying an elongated structure with opposing ends in a generally vertical orientation. The illustrated embodiment is designed to be used for carrying a pair of skis 12, but the invention may be adapted for use in carrying any other type of elongated structure. For example, the device may be designed for carrying a collapsible kayak, a snowboard, lacrosse equipment (particularly a defenseman's crosse), a rifle, a telescope, etc.
- [0022] The device 10 comprises a harness 14 constructed to attach to the user's torso when the wearable device is worn in an operative position. In the illustrated embodiment, the harness 14 includes a main body 16, a pair of shoulder straps 18, and a waist belt 20. The upper ends of the shoulder straps 18 are attached to the upper end of the main body 16, and the lower ends of the shoulder straps 18 are attached to the lower end of the main body 16. Generally, the harness 14 in Fig. 1 has a construction similar to a traditional backpack in that it is supported by straps on the shoulders and/or waist. Other constructions, however, may be used for mounting the harness to the user's torso, such as shoulder straps only, a waist strap only, a single bandolier-type strap, or the harness may be constituted by an article of clothing (e.g., a vest or jacket).
- [0023] In the illustrated embodiment, each shoulder strap 18 includes a padded upper portion 22 and an unpadded strap 24 as a lower portion. The use of padding is provided for

comfort and is not necessary, and instead should be viewed as optional. The waist belt 20 may or may not be padded, and likewise the use of this padding is also optional. Each shoulder strap optionally has an adjusting buckle 26 between the upper and lower portions 22, 24 to allow for adjustment of the length of the shoulder strap 18 and provide for an adjustable fit for users of different sizes. The adjusting buckle 26 may be of any suitable construction or configuration, and these are well-known in the art. The waist belt 20 is separated into two free end portions, a right portion and a left portion. A releasable buckle (not shown) is provided between the two portions for enabling those two portions to be secured together about the user's waist, and subsequently released for removal of the device 10. This buckle may have any construction or configuration and such buckles for waist belts are well-known in the art. The waist belt 20 is attached to the lower end portion of the main body 16 by being passed through a set of "belt loops" 28 attached to the main body 16 so that the two free end portions extend from the opposing sides of the main body 16. These belt loops 28 are simply straps attached to the main body, much like belt loops found on a typical pair of pants.

[0024] The main body 16 has a handle 30 attached to the upper end portion thereof for enabling the device 10 to be carried manually, if so desired. This handle 30 is not a necessary feature and is optional.

[0025] The main body 16 may be padded for comfort also, but again this padding is not necessary and is an optional feature.

[0026] The device 10 further comprises one or retainers 32 attached to the rear surface of the main body 16. The one or more retainers 32 are positioned with respect to the harness 14 so as to be located adjacent the user's back when the wearable device 10 is worn in the operative position. The one or more retainers 32 are constructed to retain a portion of the elongated structure between the opposing ends thereof. In the illustrated embodiment, two such retainers 32 are used, although any suitable number of retainers 32 may be used (including only one retainer). Each retainer should be constructed to suitably retain the elongated structure from falling backwards or laterally to the side, and thus operates to retain the elongated structure in its generally vertical orientation. Optionally, each retainer could be designed to vertically support the weight of the elongated structure, but this is not necessary as support of the weight may be done mostly by the receptacle 46 discussed below.

[0027] In the illustrated embodiment, each of the retainers 32 defines an opening that faces generally vertically when the wearable device 10 is attached to the user in the operative position, the generally vertically facing opening enabling the elongated structure to be received therein and extend therethrough. As illustrated, each of the one or more retainers 32

includes a loop 34 attached to the main body 16, the loop 34 defining the generally vertically facing opening. Each loop 34 preferably includes a pair of separable members 36 that releasably attach to one another. The releasable attachment of each loop 34 enables the separable members 36 to be separated to open the associated loop 34 and accommodate radial receipt of the elongated structure into the opening thereof. The releasable attachment also enables the separable members 36 to be re-attached to close the associated loop 34 and retain the elongated structure. In the illustrated embodiment, each loop 34 is defined by a strap and the separable members 36 are the opposing ends of the strap.

[0028] The separable members 36 of each loop 34 are flexible so as to facilitate opening and closing, and also wrapping about the elongated structure. In the illustrated embodiment, the releasable attachment of each loop 34 is provided by a hook and pile fastener (e.g., a VELCRO brand hook and pile fastener) having a plurality of hooks 38 on one separable member and a pile 40 on the other separable member.

[0029] The straps defining the loops 34 are attached to the main body 16 in any suitable manner. In the illustrated embodiment, a single strap 42 is attached to the main body 16 by stitching at both ends, and a series of spaced lateral stitches define lateral openings 44. The straps defining loops 34 are inserted through these lateral openings 44. This allows some limited lateral movement of the loops 34, and hence limited movement of the elongated structure retained therein. Some extent of limited movement is acceptable for reasons which shall be discussed below, but this provision is not necessary and should be considered optional.

[0030] The use of loops, whether openable or not, or defined by straps or not, is optional, and any suitable type of retainer may be used in place of the one illustrated.

[0031] The device 10 further comprises a receptacle 46 constructed to receive one of the opposing ends of the elongated structure (e.g., the bottom end of a pair of skis); and one or more support members 48 attaching the receptacle 46 to the harness 14 so as to suspend the receptacle 46 below the one or more retainers 32 and the harness 14 when the wearable device 10 is attached to the user's torso in the operative position (i.e., when it is worn as intended). The one or more retainers 32 and the receptacle 46 are arranged with respect to one another such that, when the wearable device 10 is attached to the user's torso in the operative position, the one or more retainers 32 and the receptacle 46 cooperate to support the elongated structure in the generally vertical orientation with (a) a lower one of the opposing ends of the elongated structure being received in the receptacle 46 so as to be supported by the receptacle 46, and (b) the one or more retainers 32 engaging a portion of the elongated

structure between the opposing ends thereof to retain the elongated structure in the generally vertical orientation.

[0032] In the illustrated embodiment, the receptacle 46 is made of a flexible fabric (e.g., a mesh) formed to define a pocket for receiving the lower end of the elongated structure. The pocket has a "cup" shape, characterized by an annular wall with a closed bottom and open top. However, any suitable type of receptacle may be used, such as a rigid metal or plastic basket. Preferably, the one or more support members 48 attach the receptacle 46 to the main body 16. In the illustrated embodiment, two support members 48 are used, but any number of support members 48 may be used instead of the two illustrated. The support members 48 each may be elongated members, and these elongated members each may be flexible straps 49 connected between the main body 16 and the receptacle 46. These support members 48 may be attached to the harness 14 at any location, and as illustrated are attached to the lower edge of the main body 16. The attachment is affected by folding material at the lower edge of the main body 16 upwardly and stitching or otherwise attaching it so as to form a laterally extending passage across the main body 16. A single strap is inserted through this passage so that its opposing free ends extend outwardly therefrom to define the illustrated individual straps 49. These free ends of the straps can extend downwardly to form part of the support members 48. It should be understood, however, that the support members and their attachment are not limited to the construction or elements illustrated, and any suitable structure or attachment may be used.

[0033] One advantageous, but optional, feature is to allow for adjustment of the height of the receptacle 46 (i.e., the distance at which the receptacle 46 is suspended below the main body 16 when the wearable device 10 is worn in the operative position). By enabling the height of the receptacle 46 to be adjusted, the user is able to select the appropriate receptacle height to properly balance the elongated structure on the device 10. This is particularly advantageous when the elongated structure is rather heavy, such as may be the case with multiple pairs of skis, or a collapsible kayak, for example. If the height of the receptacle 46 is such that the elongated structure is too high, the load will be too high on the user's back, and will tend to push the user forward, which creates unnecessary strain on the lower back. Likewise, if the height of the receptacle is such that the elongated structure is too low, the elongated structure may be in a position where it unnecessarily interferes with the user's gait (this would only happen with particularly long elongated structures, and while some interference with the user's gait could occur even with proper positioning of the receptacle, it is desirable to locate the elongated structure such that this situation is minimized

without raising it too high). Additionally, the user may optionally desire to use the adjustability for other reasons besides proper centering of the load. For example, with a skier who often enters and exits ski lodges, he/she may choose to allow the skis to "ride low" in order to avoid the need for ducking through low doorways.

[0034] In the illustrated embodiment, each of the flexible straps 49 have length adjusters 50 to enable adjustment of a distance at which the receptacle is suspended below the main body 16 when the wearable device 10 is worn in the operative position. These length adjusters 50 may have any suitable construction, and in the illustrated embodiment the length adjusters 50 are buckles. For example, as illustrated, each buckle may have a short strap length 52 fixed thereto and connected to the receptacle 46. The straps 49 are threaded into the buckle 50 and the buckle 50 may be used to adjust the effective length of the straps 49. The type of buckle that would suit this purpose is well-known in the art for other applications (such as adjusting the length of a shoulder strap in a backpack), and any suitable construction may be used for adjusting the length of the support members 48.

[0035] As mentioned above, some lateral movement may be provided for the retainers 32. This is a desirable, although optional, feature in the context of using the receptacle 46 suspended by the support members 48. By allowing lateral movement at the retainers 32, when a lateral force is imparted to the elongated structure, or the user moves so as to cause lateral shifting of the elongated structure, the upper part of the elongated structure will move, with the lower part in the receptacle remaining somewhat stationary. Specifically, with the weight of the elongated structure being borne by the receptacle 46, the tendency will be for the lower end of the elongated structure to act somewhat as a pivot with the upper part of the elongated structure being allowed to move laterally by the retainers 32, as discussed above. This is desirable, as it minimizes lateral movement of the lower end of the elongated structure, which could strike the user's leg and interfere with the user's gait.

[0036] Also, it is advantageous, but optional, to orient the retainers 32 at a slight angle relative to vertical (when the device 10 is worn on the user's back), such that the longitudinal extent of the elongated structure will be at that angle. If the elongated structure were perfectly upright, the tendency would be for the elongated structure to tilt back and forth laterally as the user's walks. With the elongated structure at an angle, such movement is minimized.

[0037] Figure 4-6 illustrate an alternative embodiment. In those Figure, the wearable device is generally indicated at 100, and is constructed similarly to the embodiment of Figs. 1-3. Thus, where common elements are present, common reference numbers will be used

between the embodiments. One significant difference between device 10 and device 100 is the harness 14. Otherwise, the retainers 32 and receptacle 46, and their associated structures are generally the same, and the same variations mentioned above for those features may be implemented in the device 100 with equal effect.

[0038] In the device 100, the harness 14 omits the waist belt 20 and dual shoulder straps 18. Instead, the harness 14 mounts in a bandolier-style fashion. Specifically, the main body 16 has a primary shoulder strap 102 having an upper section 104 and a lower section 106. When the device 100 is attached to the user in its operative position, the upper section 104 extends up over one shoulder of the user (in the Figures, this is the right shoulder) and down in front of the user's chest. The lower section 106 extends from the lower part of the main body around the user's waist on the opposite side of the user's body (in the Figures, this is the left side of the waist), and then also up in front of the user's chest. The upper and lower sections are joined by a releasable fastener 108 of any suitable construction. In the illustrated embodiment, this fastener 108 is a hook and pile fastener, with the pile being shown at 110 on the lower portion 106, and the hooks being hidden from view on the upper section 104.

[0039] A supplemental shoulder strap 112 is attached between the lower section 106 of the primary shoulder strap 102 and the upper part of the main body 16. This shoulder strap 112 is optional, and not necessary. However, it is preferred to prevent shifting of the device 100 on the user. Optionally, a releasable fastener in the form of a buckle 114 having a female part affixed to the lower section 106 of the primary shoulder strap 102 and a male part attached to the end of strap 112 may be used to provide for releasing the shoulder strap 112 when removing the device. Any other suitable fastener may be used, or the fastener may be omitted and the user could simply slip his/her arm under the strap 112 when adorning the device 100.

[0040] Figs. 7 and 8 illustrate another embodiment, device 200, that is similar to the device 100. Common reference numbers will be used where applicable. In the device 200, the same bandolier-type mounting is used, except supplemental shoulder strap 112 is omitted, although it may be used if desired. In this device 200, retainers 32 are omitted in favor of a single retainer 202. Retainer 202 is comprised of two flaps 204, 206 each having an elongated configuration, with the longitudinal extent being oriented in the vertical direction (as the device 200 will be worn). Figure 8 shows the flaps 204, 206 in an open position. In this open position, the elongated structure (e.g., skis 12) can be laid on the main body 16 between the flaps 204, 206 with the lower end inserted into the receptacle 46. Then, the flaps

204, 206 can be folded over so as to encircle the elongated structure. A releasable fastener is provided to secure the flaps 204, 206 together in the closed position, shown in Figure 7. Preferably, the fastener is in the form of a hook and pile fastener, and the Figures show the hooks 208 on the inner edge of flap 204. The pile is located on the outer surface of flap 206 in spaced relation from its edge, so that the flap 204 overlaps the flap 206 when closed. The flaps 204, 206 may be padded to provide protection to the elongated structure, although this is not necessary. One particular advantage of this embodiment is its ease of loading the elongated structure onto the device 200. Also, because the flaps are elongated, they hold the elongated structure relatively securely, and thus minimize any lateral movement or tilting of the elongated structure. The flaps 204, 206 can be fastened snugly to ensure that this is the case.

[0041] Any of the above embodiments could be constructed so that it can be collapsed for storage. For example, the device could be constructed so to collapse into a "fanny pack" type configuration, or collapse to be stored in a separate fanny pack. Reference may be made to U.S. Patent Nos. 4,518,107 and 5,540,364 for disclosures in this respect. The entirety of each of those patents is hereby incorporated into the present application by reference.

[0042] Figures 9-12 illustrate another embodiment wherein a harness is incorporated into a wearable garment, and particularly a ski jacket. The device is indicated 300, and the same reference numerals from previous embodiments will be used where applicable to denote corresponding structures. The device 300 comprises an outer garment shell 302 having the construction and appearance of a conventional ski jacket (i.e., it has a main body 304 for surrounding the user's torso, an opening 306 at its top for the wearer's neck, a larger opening 308 at its bottom for encircling the wearer's waist, a closure 310 extending between the openings 306, 308 in the form of a zipper, buttons, etc., and a pair of sleeves 312 extending from the lateral sides of the main body 304). The outer garment shell 302 may be made of any material, and may have any other configuration. For example, it could have a vest configuration (i.e., no sleeves). For other applications where the device 300 is intended to be used for carrying other types of elongated structures, the garment shell 302 may be designed for that specific purpose, if so desired. For example, if the device 300 is intended for use to carry hunting rifles, then the outer garment shell 302 could be a camouflage jacket, the use of camouflage being preferred by hunters for hiding from their prey. Likewise, if the device is intended for use in porting a collapsible kayak, the outer garment shell 302 could be a waterproof jacket suitable for use while kayaking. Also, it could be a designed as a life vest

with internal flotational foam. By wearing the life vest while carrying the kayak, the wearer avoids the need for carrying the life vest separately. Further, the outer garment shell 302 could be configured as a rain poncho.

[0043] In the illustrated device 300, an internal harness 14 similar to the ones described above is stitched or otherwise affixed to the interior of the outer garment shell 302. Specifically, the back of the outer garment shell 302 and the main body 16 of the internal harness 14 are stitched together along lines 314, seen best in Fig. 11 and 12. Also, shoulder straps 18 on the internal harness 14 may be stitched to the front flaps 316, 318 of the outer garment shell's front. By affixing the internal harness 14 within the outer shell 302 as such, the wearer can adorn the device 300 like a regular jacket, and his/her arms will easily pass through the shoulder straps as they are being inserted into the sleeves 312. The shoulder straps 18 may be provided with buckles for adjusting to fit the wearer, as discussed above.

[0044] On the back of the garment shell 302, are provided a pair of closures 320 and 322. As illustrated, these closures 320, 322 are zippers, but they may be any suitable type of closure (e.g., buttons, clasps, hook and pile fasteners, etc.). Because the main body 16 of the internal harness 14 is stitched inside of the back of the garment shell 302 along lines 314, this creates a pocket or interior space between the shell 302 and main body 16. It is contemplated to use only one large space, or multiple individual spaces. These closures 320 and 322 are positioned slightly inside of the stitching, and are movable to open and close openings 324 and 326, respectively. These openings 324, 326 provide access to the interior of the pocket or space defined between the shell 302 and main body 16. The retainers 32, receptacle 46, and their associated structures are mounted to the back of the main body 16 and thus are normally stored within this space between the outer garment shell 302 and the main body 16. To place these structures in their use position, the wearer can simply open the closures 320, 322 and pull the structures out from that space. When the wearer desires to store those structures, they can then be placed back into that space, and the closures 320, 322 can be With the closures 320, 322 closed, the device 300 has the appearance of a conventional jacket, and it is not readily discernible that the device 300 is capable of being used for carrying elongated structures.

[0045] The use of an internal harness 14 for mounting the retainers 32 and receptacle 46 is advantageous because it allows the weight of the elongated structure to be borne by the internal harness 14 instead of the outer garment shell 302. Typically, outer garment shells 302 are designed to accommodate wearer's of varying sizes, and thus often may have somewhat of a loose or baggy fit. Also, a slightly loose or "baggy" fit is desirable for providing

freedom of movement, which is advantageous in athletic sports, such as skiing or kayaking. However, with a loose or baggy fit, if the retainers 32 and receptacle 46 were attached to the outer garment shell 302, the weight of the elongated structure would pull the garment shell 302 backwards, thus forcing the neck opening 306 up against the wearer's neck and removing some of the looseness from the front side of the shell 302. This would render the device 302 uncomfortable and may restrict some freedom of movement. In contrast, by using the internal harness 14, the weight can be transferred to the wearer's shoulders via the shoulder straps 18. This would allow the weight to be distributed much in the way as the previously described embodiments, and allows the outer shell 302 to remain worn as a conventional jacket in a comfortable fashion.

[0046] This embodiment wherein an internal harness 16 is used under an outer garment shell 302 may have any construction or configuration and may include any of the features or alternatives described above with respect to the previous embodiments. Further, other alterations of the construction may be provided within the invention. Additionally, this construction, while preferably used with receptacle 46, may be practiced without the use of that receptacle 46, and thus any other type of support or more than one support may be used for the elongated structure.

[0047] Any device made according to this invention may be supplemented with the inclusion of a water bladder in the main body. The water bladder would have a hose leading from the bladder and extending over the user's shoulder. This would enable the user to drink water and remain hydrated, which is particularly useful when skiing (or participating in any other activity) for long periods of time, or when the type of skiing (or other activity) demands long hikes with the skis (or other elongated structure) carried by the device on the user's back.

[0048] The foregoing illustrated embodiment has been provided solely for illustrating the structural and functional principles of the present invention and is not intended to be limiting. To the contrary, the present invention is intended to encompass all modifications, substitutions, alterations, and equivalents within the spirit and scope of the appended claims.